Title (en)
SYSTEM AND METHOD FOR DYNAMICALLY BIASING OSCILLATORS FOR OPTIMUM PHASE NOISE

Title (de)
SYSTEM UND VERFAHREN ZUR DYNAMISCHEN VORSPANNUNG VON OSZILLATOREN FÜR OPTIMALES PHASENRAUSCHEN

Title (fr)
SYSTÈME ET PROCÉDÉ DE POLARISATION DYNAMIQUE D'OSCILLATEURS POUR UN BRUIT DE PHASE OPTIMUM

Publication
EP 3243272 A1 20171115 (EN)

Application
EP 15805682 A 20151120

Priority
- US 201562101795 P 20150109
- US 201514666084 A 20150323
- US 2015061877 W 20151120

Abstract (en)
[origin: WO2016111761A1] Systems and methods for biasing frequency oscillators to minimize phase noise are disclosed. The system may comprise a tank circuit having an inductor, at least a first coupling capacitor and a second coupling capacitor. The system may further comprise a varactor circuit electrically connected to the first coupling capacitor and the second coupling capacitor. The system may further comprise at least one first metal oxide semiconductor (MOS) device electrically connected in shunt with the tank circuit and a bias voltage. The at least one first MOS device may be electrically connected to a first gate bias voltage configured to bias the at least one first MOS device such that a first gate-to-source voltage of the at least one first MOS device remains below the first threshold voltage.

IPC 8 full level
H03B 5/12 (2006.01)

CPC (source: CN EP US)
H03B 5/1203 (2013.01 - US); **H03B 5/1206** (2013.01 - CN EP US); **H03B 5/1209** (2013.01 - US); **H03B 5/1228** (2013.01 - CN EP US); **H03B 5/1243** (2013.01 - US); **H03B 5/1262** (2013.01 - US); **H03B 5/1265** (2013.01 - CN EP US); **H03B 5/129** (2013.01 - US)

Citation (search report)
See references of WO 2016111761A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2016111761 A1 20160714; CN 107112948 A 20170829; EP 3243272 A1 20171115; JP 2018506894 A 20180308; US 2016204738 A1 20160714; US 9444400 B2 20160913

DOCDB simple family (application)
US 2015061877 W 20151120; CN 201580072692 A 20151120; EP 15805682 A 20151120; JP 2017536247 A 20151120; US 201514666084 A 20150323